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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/442,906	11/18/1999	SCOTT THOMAS MARCOTTE	EN999+121	6545

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EXAMINER

WILLETT, STEPHAN F

ART UNIT PAPER NUMBER

2152

DATE MAILED: 10/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/442,906

Applicant(s)  
Marcotte

Examiner  
Stephan Willett

Art Unit  
2152



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Nov 18, 1999
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above, claim(s) 3-8, 12-15, 18-23, 27-30, 33-38, and 42-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 9-11, 16, 17, 24-26, 31, 32, and 39-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 1 6) ☐ Other:

**DETAILED ACTION**

***Title Change***

1. Pursuant to MEP. 606.01, the title should be changed to provide a complete and detailed description of the invention.

***Election/Restriction***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-2, 9-11, 16-17, 24-26, 31-32 and 39-41, drawn to bypassing the use of buffers to transmit data onto a transmission medium are classified in class 709, subclass 250.
  - II. Claims 3-6, 12-13, 18-21, 27-28, 33-36 and 42-43, drawn to swapping buffers or pointers to data between the file system and the sender are classified in class 710, subclass 52.
  - II. Claims 7-8, 14-15, 22-23, 29-30, 37-38 and 44-45, drawn to translating data in buffers are classified in class 709, subclass 246.
3. The inventions are distinct, each from the other because: The claims in Group I involve steps to not store data in certain buffers, while the claims in Group II specifically involve restoring data in a different buffer, which is classified in a different class from Group I and Group III specifically involve translating data to a different format, which is classified in deferent classes than Group I and II.
4. Inventions I, II and III are related as combination and subcombination. Inventions in this

relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MEP. § 806.05(c)). In the instant case, the combination as claimed in Groups II and II do not require the particulars of the subcombination as claimed in Group I because the particular step to swap buffers or pointers to stored data in the claims in Group II and the particular step to translate data in Group III are not required to skip storing data when data is passed from a computer onto a transmission medium as described in the claims in Group I. The steps to skip storing data in a buffer is an independent method that is not required for the claims in Groups II or II to be utilized. The subcombination has separate utility in itself in that the process to skip a buffer as described in the claims in Group I, can be used in other applications.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. Because these inventions are distinct for the reasons given above and the searches required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

8. Applicant's election with traverse of claims 1-2, 9-11, 16-17, 24-26, 31-32 and 39-41 by Blanche Schiller by telephone on September 6, 2002 is acknowledged.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-2, 9-11, 16-17, 24-26, 31-32 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in the background in view of Ledain et al. with Patent Number 6,021,408 and Hamilton et al. with Patent Number 5,799,150.

11. Regarding claim(s) 1, 16, 31, Applicant's Background Art teaches transmitting data between a file system as "Distributed File Services (DFS) systems data is moved from one set of buffers within the server to another set of buffers within the server", page 1, lines 14-17.

Applicant's Background Art teaches the invention in the above claim(s) except for explicitly teaching bypassing non-file system buffers. Hamilton teaches transferring data in a network environment. Hamilton teaches media files with pointers to a file list, col. 6, lines 34-36, 51-59 and col. 7, lines 6-13. Hamilton teaches transmitting data in a computer network, col. 9, lines 13-

14. Hamilton teaches bypassing system buffers as "no system memory buffer copy ... this traditional method is bypassed ... by minimizing data copying", col. 9, lines 59-67, and col. 10, lines 34-39. Hamilton teaches buffer bypassing "to transfer the media data portion of the packet directly from the memory network interface into the main memory or other I/O device memory", col. 10, lines 2-6. Hamilton teaches the invention in the above claim(s) except for explicitly teaching bypassing non-file system buffers in a file system. In that Hamilton operates to transfer

data quickly the artisan would have looked to the transmission buffering arts for details of implementing buffer bypasses to transmit data. In that art, Ledain, a related network data transmission device, teaches “a highly throughput optimized apparent filesystem”, col. 9, lines 33-34 in order to provide quick data throughput. Ledain specifically teaches “file write data bypasses the main memory buffer cache and is written exclusively to the disk cache”, col. 3, lines 18-19 and col. 12, lines 38-44. Buffer bypassing in a file system data transfer is taught. Further, Ledain suggests “a significant drawback of merely using a buffer cache”, col. 2, lines 12-13 will result from certain implementations. The motivation to incorporate less buffer delays insures that data throughput can be increased. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the buffer bypassing as taught in Ledain into the transmission system described in the Hamilton patent because Hamilton operates with real time data transfers and Ledain suggests that optimization can be obtained with file system data transfers. Therefore, by the above rational, the above claim(s) are rejected.

12. Regarding claim(s) 2, 17, 32, Hamilton teaches passing said data to a storage medium, col. 5, lines 36-42 and Ledain teaches mass storage mediums interconnected with a file system, col. 8, lines 47-50

13. Regarding claim(s) 9, 24, 39, Hamilton teaches sending data to a receiver, col. 8, lines 1-3.

14. Regarding claim(s) 10-11, 25-26, 40-41, Hamilton teaches a routine to provide pointers to said sent data, col. 8, lines 39-43 and col. 7, lines 51-52.

***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited. A close review of the Daberko reference with Patent Number 5,787,445 and Kori reference with Patent Number 6,092,170 is suggested. The other references cited teach numerous other ways to perform buffering, thus a close review of them is suggested.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606.

18. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605..

sfw

September 25, 2002

A handwritten signature in black ink, appearing to read 'LH LUU', is written above a long, horizontal, slightly wavy line that serves as a separator.

LE HIEN LUU  
PRIMARY EXAMINER